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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,359	04/13/2004	Elson Dias da Silva	1000-1393	4729

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EXAMINER

PRICE, CRAIG JAMES

ART UNIT PAPER NUMBER

3753

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/823,359

Applicant(s)

DA SILVA, ELSON DIAS

Examiner

Craig Price

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/13/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. Correction is required. See MPEP 608.01(b).
2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. For example, in paragraph 0172, line 4; the word "form" may be replaced with --from--.
3. The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. A search as best understood has been made, although several examples within the specification are not clear as to how the invention is made. For example, the following items are not understood: Paragraph 0173 discusses reference to a gliding bird, paragraph 0215 discusses a molecular combustion engine which can be "halted...for stopping purposes, with no further consequences to its functioning..." paragraph 0217 discusses biomass as a sustainable energy system for human use, paragraphs 220-223 talks about food production systems and obesity.

These are merely a few examples taken from the specification, which cites several other examples, which are not clear as to how the invention is made, for one of ordinary skill in the art to understand.

Applicant is required to submit an amendment, which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

A shortened statutory period for reply to this action is set to expire ONE MONTH or THIRTY DAYS, whichever is longer, from the mailing date of this letter.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. Based upon applicant's disclosure, it appears that applicant believes that a significant amount of energy can be harvested to offset the inherent losses in known engines. For example, in paragraph 28, applicant asserts that "[a] very efficient combustion engine would convert nearly all chemical bonding energy of the biomass to mechanical rotating energy..." There is no teaching in the present application that could be construed to improve the efficiency of any known devices. In fact, the present invention would appear to be an extremely inefficient manner to "harvest" the energy that is provided to the moving mass. Furthermore, applicant has not disclosed any credible means of "harvesting" the energy. Merely moving fluid through a tube does not "harvest" any energy.

*Claim Rejections - 35 USC § 112*

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant has omitted any disclosure of how to “harvest” the energy. Absent some teaching, one skilled in the art would not be able to make and/or use the invention.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with informalities too numerous to mention specifically. The following informalities are merely exemplary thereof.

The metes and bounds of the limitation “gradual energy exchange” are unclear. What is considered “gradual” or not “gradual. One of ordinary skill in the art would not be apprised of the scope of the claims.

The claims are incomplete for omitting essential elements and steps, such omission amounting to a gap between the elements. The omitted elements are the structure that “harvests” the energy and the omitted steps are how one would “harvest” the energy.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “siphon” in the claims is used by the claim to mean “tube”, while the accepted meaning is “siphon.” The term is indefinite because the specification does not clearly redefine the term.

### ***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-20, as best understood, are rejected under 35 U.S.C. 102(b) as being unpatentable by De Montmorency (4,465,430).

Regarding claims 1 and 11, De Montmorency discloses, through the use of the system shown in figures 1-6, a method/system comprising, providing energy (through the change in height) to a moving mass (water) in at least one reversible direction, and harvesting the energy from the moving mass in at least one reversible direction (energy is harvested in an opposite

Art Unit: 3753

direction of the flow through the use of the wheel at the opposite end of the shaft from the propeller, to drive an electrical generator, Col. 2, Lns. 20-26) by containing the moving mass for an energy exchange without partitioning the moving mass (the swirling motion from the propeller 32 only redirects the flow around the blades allowing the flow to continually move and does not partition the flow as similar to a paddle wheel) as the moving mass travels from a straight tubular zone (12) to an arc zone (26) thereof and back to the straight tubular zone (14) to permit a gradual energy exchange of a tangential vector thereof (Col. 3, Lns. 50-53).

Regarding claims 2 and 12, De Montmorency discloses, a method/system further comprising, reversibly transporting the moving mass from a low mass matrix potential a high mass matrix potential and from at least one position to another position thereof in a reversible direction (the system is configured to flow from the lower height to a higher position) by providing the energy via a masstubarc flow siphon (defined within the specification in paragraph 0107, lines 3-5, "Such segments generally include a straight line for the inertial force section and an arc segment for the rotating force section" (which could be merely a tube having a bend) under a non-partitioning mass flow.

Regarding claims 3 and 13, De Montmorency discloses a method/system further comprising, reversibly transporting the mass from a zone of high mass matrix potential to a zone of low mass matrix potential and from one position to another position in association with a reversible direction by harvesting the energy via a masstubarc flow siphon under a non-partitioning mass flow (the system is configured to work in the opposite direction).

Regarding claims 4 and 14, De Montmorency discloses a method/system further comprising the step of automatically dynamically and reversibly exchanging energy between

Art Unit: 3753

inertial forces and rotating forces of a masstubarc flow siphon under a non-partitioning mass flow (Col. 3, Lns. 51-56).

Regarding claims 5 and 15, De Montmorency discloses a method/system further comprising exchanging the energy utilizing a masstubarc flow siphon, such that the energy is exchangeable through the masstubarc flow siphon in a reversible path between inertial and rotating forces thereof (the system shown is configured to flow in a reversible manner therefore energy is exchangeable).

Regarding claims 6 and 16, De Montmorency discloses a method/system further comprising exchanging the energy utilizing a masstubarc flow siphon, such that the energy is exchangeable through the masstubarc flow siphon in a reversible path between rotating and inertial forces (the system shown is configured to flow in a reversible manner therefore energy is exchangeable).

Regarding claims 7-9 and 17-19, the method/system and device of DeMontmorency does comprise energy, which is kinetic (moving) and is mechanical (as it is a machine).

Regarding claim 10, the device shown by De Montmorency will perform the methods as recited in claims 11-19, during normal operational use of the device, the method of making or using the device is inherent in using the apparatus.

Regarding claim 20, De Montmorency discloses the system wherein the masstubarc flow siphon comprises a tubular containing structure with uniform dimensions having at least two linear sides thereof associated with inertial forces and joined by a rounding arc portion that comprises a main interface between rotating forces in order to deliver said energy to and from the inertial forces as shown in figures 1-6.



***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Williams (5,423,415), Yeh (4,165,614), Cooper (3,854,032), Long et al. (3,778,578), Fonda-Bonardi (3,599,431), Turner (2,258,167), Hashimoto (5,671,602), Gardiner (5,167,483), Singer (3,601,979), Lee (5,753,978), and Kumbatovic (5,311,064) all have similar energy inventions.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM M-R.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP

31 August 2006



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